

“Birds of a Feather, Do Sanctioned States Flock Together?”
Supplemental Files - Online Appendix

Foreign Policy Analysis

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Table A1: Summary Statistics for the Sanctions Busting Analyses' Variables

	Obs.	Mean	Std. Dev.	Min	Max
<i>Trade-Based Sanctions Busting</i>	128,393	0.02	0.14	0	1
<i>Sanctioned Third Party</i>	128,393	0.12	0.32	0	1
<i>Third-Party Economic Size</i>	122,452	16.42	2.15	9.53	22.65
<i>Third-Party Commercial Openness</i>	116,700	0.46	1.68	0.00	31.66
<i>Third-Party Commercial Dependence</i>	91,899	0.01	0.03	0	4.73
<i>Only a U.S.-Third Party DP</i>	128,393	0.26	0.44	0	1
<i>Third Party DPs with Both</i>	128,393	0.03	0.18	0	1
<i>Only a Target-Third Party DP</i>	128,393	0.02	0.15	0	1
<i>Only Target Democratic</i>	113,194	0.08	0.27	0	1
<i>Both Democracies</i>	113,194	0.04	0.20	0	1
<i>Only the Third Party Democratic</i>	113,194	0.30	0.46	0	1
<i>Target-Third Party Distance</i>	128,393	8.13	1.47	0	9.42
<i>Target-Third Party Shared Border</i>	128,393	0.03	0.16	0	1
<i>Target Economic Size</i>	123,182	17.30	1.69	12.23	22.65
<i>Harsh U.S. Sanctions</i>	128,393	0.13	0.34	0	1
<i>Duration of U.S. Sanctions</i>	128,393	10.49	11.45	0	56
<i>Time Since Busting</i>	128,393	8.50	9.51	0	56

Table A2: Correlation Matrix for the Sanctions Busting Analyses' Variables

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.
<i>1. Trade-Based Sanctions Busting</i>	1																
<i>2. Sanctioned Third Party</i>	0.00	1															
<i>3. Third-Party Economic Size</i>	0.22	0.10	1														
<i>4. Third-Party Commercial Openness</i>	-0.01	-0.07	-0.10	1													
<i>5. Third-Party Commercial Dependence</i>	0.09	0.03	-0.02	-0.02	1												
<i>6. Only a U.S.-Third Party DP</i>	0.10	-0.08	0.29	0.11	-0.06	1											
<i>7. Third Party DPs with Both</i>	0.05	0.03	-0.02	-0.03	0.05	-0.13	1										
<i>8. Only a Target-Third Party DP</i>	0.04	0.07	-0.02	0.00	0.10	-0.12	-0.04	1									
<i>9. Only Target Democratic</i>	-0.04	0.03	-0.15	-0.03	0.01	-0.08	-0.02	-0.05	1								
<i>10. Both Democracies</i>	0.03	-0.07	0.06	0.03	0.00	0.09	0.10	-0.04	-0.07	1							
<i>11. Only the Third Party Democratic</i>	0.08	-0.20	0.31	0.10	-0.04	0.43	0.00	-0.12	-0.22	-0.17	1						
<i>12. Target-Third Party Distance</i>	-0.15	-0.07	-0.02	0.02	-0.23	0.17	-0.20	-0.28	0.02	0.02	0.08	1					
<i>13. Target-Third Party Shared Border</i>	0.13	0.07	0.03	-0.03	0.22	-0.08	0.13	0.21	-0.01	-0.02	-0.07	-0.90	1				
<i>14. Target Economic Size</i>	-0.02	0.03	0.07	0.00	0.17	-0.06	-0.05	-0.05	0.03	0.03	-0.03	-0.03	0.05	1			
<i>15. Harsh U.S. Sanctions</i>	0.00	0.00	0.04	0.00	-0.02	0.00	0.00	-0.03	-0.10	-0.06	0.04	-0.04	0.01	0.06	1		
<i>16. Duration of U.S. Sanctions</i>	0.00	0.00	0.11	-0.01	-0.04	0.00	-0.09	-0.02	-0.03	-0.01	0.05	0.05	-0.03	0.05	-0.13	1	
<i>17. Time Since Busting</i>	-0.12	0.02	0.07	0.00	-0.05	0.01	-0.08	-0.02	-0.02	-0.01	0.04	0.07	-0.05	0.06	-0.12	0.89	1

Table A3: Analyzing the Determinants of Extensive Trade-Based Sanctions Busting Using a Constrained Model

	Model 1	Model 2	Model 3
<i>Sanctioned Third Party</i>	-0.819*** (0.09)	-0.818*** (0.09)	-0.818*** (0.08)
<i>Third-Party Economic Size</i>	0.863*** (0.02)	0.863*** (0.02)	0.863*** (0.02)
<i>Target Economic Size</i>	-0.098*** (0.02)	-0.098*** (0.02)	-0.098*** (0.02)
<i>Target-Third Party Distance</i>	-0.721*** (0.05)	-0.720*** (0.05)	-0.720*** (0.04)
<i>Target-Third Party Shared Border</i>	-3.586*** (0.41)	-3.583*** (0.41)	-3.583*** (0.29)
<i>Time Since Busting</i>	-0.896*** (0.04)	-0.895*** (0.04)	-0.895*** (0.02)
<i>Time Since Busting</i> ²	0.048*** (0.00)	0.047*** (0.00)	0.047*** (0.00)
<i>Time Since Busting</i> ³	-0.001*** (0.00)	-0.001*** (0.00)	-0.001*** (0.00)
<i>Constant</i>	-10.396*** (0.56)	-10.390*** (0.56)	-10.390*** (0.46)
<i>Probability > χ^2</i>	89615	89615	89615
<i>Observations</i>	0.453		

Notes: *, **, *** denote statistical significance at the 90%, 95%, and 99% confidence levels using two-tailed tests.

Table A4: Analyzing the Determinants of Extensive Trade-Based Sanctions Busting Without the Top-5 Leading Sanctions Busters

	Model 1	Model 2	Model 3
<i>Sanctioned Third Party</i>	-0.247*** (0.09)	-0.245*** (0.09)	-0.245** (0.10)
<i>Third-Party Economic Size</i>	0.666*** (0.02)	0.665*** (0.02)	0.665*** (0.02)
<i>Third-Party Commercial Openness</i>	0.089*** (0.01)	0.091*** (0.01)	0.091*** (0.02)
<i>Third-Party Commercial Dependence</i>	4.052*** (0.57)	4.028*** (0.57)	4.029*** (0.41)
<i>Only a U.S.-Third Party DP</i>	0.341*** (0.10)	0.341*** (0.10)	0.341*** (0.10)
<i>Third Party DPs with Both</i>	0.660*** (0.11)	0.661*** (0.11)	0.661*** (0.12)
<i>Only a Target-Third Party DP</i>	0.558*** (0.13)	0.558*** (0.13)	0.558*** (0.13)
<i>Only Target Democratic</i>	-0.019 (0.17)	-0.010 (0.17)	-0.010 (0.17)
<i>Both Democracies</i>	-0.018 (0.17)	-0.011 (0.17)	-0.011 (0.17)
<i>Only the Third Party Democratic</i>	-0.298*** (0.09)	-0.297*** (0.09)	-0.297*** (0.09)
<i>Target-Third Party Distance</i>	-0.894*** (0.07)	-0.893*** (0.07)	-0.893*** (0.05)
<i>Target-Third Party Shared Border</i>	-5.048*** (0.56)	-5.042*** (0.56)	-5.042*** (0.39)
<i>Target Economic Size</i>	-0.204*** (0.03)	-0.204*** (0.03)	-0.204*** (0.02)
<i>Harsh U.S. Sanctions</i>	-0.042 (0.10)	-0.040 (0.10)	-0.040 (0.11)
<i>Duration of U.S. Sanctions</i>	0.084*** (0.00)	0.083*** (0.00)	0.083*** (0.00)
<i>Time Since Busting</i>	-0.799*** (0.04)	-0.796*** (0.04)	-0.796*** (0.03)
<i>Time Since Busting²</i>	0.036*** (0.00)	0.036*** (0.00)	0.036*** (0.00)
<i>Time Since Busting³</i>	-0.000*** (0.00)	-0.000*** (0.00)	-0.000*** (0.00)
<i>Constant</i>	-4.619*** (0.80)	-4.606*** (0.80)	-4.606*** (0.66)
<i>Probability > χ^2</i>	79791	79791	79791
<i>Observations</i>	0.447		

Notes: *, **, *** denote statistical significance at the 90%, 95%, and 99% confidence levels using two-tailed tests.

Table A5: Analyzing the Determinants of Extensive Trade-Based Sanctions Busting in First 3 Years (Models 1-2) vs. After 3 Years (Models 3-4)

	Model 1 Relogit	Model 2 Firth	Model 3 Relogit	Model 4 Firth
<i>Sanctioned Third Party</i>	-0.301** (0.12)	-0.301** (0.13)	-0.556*** (0.14)	-0.556*** (0.14)
<i>Third-Party Economic Size</i>	0.791*** (0.03)	0.791*** (0.03)	0.588*** (0.03)	0.588*** (0.03)
<i>Third-Party Commercial Openness</i>	0.050*** (0.02)	0.050** (0.02)	0.090*** (0.01)	0.090*** (0.02)
<i>Third-Party Commercial Dependence</i>	3.893*** (0.56)	3.892*** (0.48)	5.151*** (1.21)	5.151*** (1.04)
<i>Only a U.S.-Third Party DP</i>	1.110*** (0.11)	1.110*** (0.11)	0.365*** (0.10)	0.365*** (0.11)
<i>Third Party DPs with Both</i>	1.125*** (0.14)	1.125*** (0.15)	0.002 (0.21)	0.002 (0.21)
<i>Only a Target-Third Party DP</i>	0.849*** (0.22)	0.849*** (0.21)	0.310 (0.20)	0.310* (0.19)
<i>Only Target Democratic</i>	0.280 (0.21)	0.280 (0.20)	-0.330 (0.32)	-0.330 (0.30)
<i>Both Democracies</i>	0.574*** (0.16)	0.574*** (0.16)	0.398** (0.16)	0.398** (0.19)
<i>Only the Third Party Democratic</i>	0.122 (0.11)	0.122 (0.12)	-0.334*** (0.11)	-0.334*** (0.12)
<i>Target-Third Party Distance</i>	-0.739*** (0.09)	-0.739*** (0.06)	-0.353*** (0.06)	-0.353*** (0.05)
<i>Target-Third Party Shared Border</i>	-3.706*** (0.75)	-3.706*** (0.49)	-1.667*** (0.45)	-1.667*** (0.38)
<i>Target Economic Size</i>	-0.219*** (0.03)	-0.219*** (0.03)	-0.113*** (0.03)	-0.113*** (0.03)
<i>Harsh U.S. Sanctions</i>	-0.325** (0.13)	-0.325*** (0.12)	-0.043 (0.11)	-0.043 (0.11)
<i>Time Since Busting</i>	-1.970*** (0.36)	-1.970*** (0.36)	-1.032*** (0.04)	-1.032*** (0.03)
<i>Time Since Busting²</i>	0.578 (0.36)	0.578 (0.36)	0.051*** (0.00)	0.051*** (0.00)
<i>Time Since Busting³</i>	-0.055 (0.09)	-0.055 (0.08)	-0.001*** (0.00)	-0.001*** (0.00)
<i>Constant</i>	-8.126*** (0.97)	-8.126*** (0.77)	-6.564*** (0.78)	-6.564*** (0.72)
<i>Observations</i>	30608	30608	52535	52535

Notes: *, **, *** denote statistical significance at the 90%, 95%, and 99% confidence levels using two-tailed tests.

Table A6: Analyzing the Determinants of Extensive Trade-Based Sanctions Busting with Only Severe Sanctions Episodes

	Model 1 Logit	Model 2 Relogit	Model 3 Firth
<i>Sanctioned Third Party</i>	-0.408*** (0.09)	-0.406*** (0.09)	-0.406*** (0.10)
<i>Third-Party Economic Size</i>	0.742*** (0.02)	0.741*** (0.02)	0.741*** (0.02)
<i>Third-Party Commercial Openness</i>	0.063*** (0.01)	0.065*** (0.01)	0.065*** (0.02)
<i>Third-Party Commercial Dependence</i>	4.217*** (0.63)	4.188*** (0.63)	4.189*** (0.42)
<i>Only a U.S.-Third Party DP</i>	0.842*** (0.07)	0.841*** (0.07)	0.841*** (0.08)
<i>Third Party DPs with Both</i>	0.776*** (0.10)	0.777*** (0.10)	0.777*** (0.11)
<i>Only a Target-Third Party DP</i>	0.800*** (0.14)	0.801*** (0.14)	0.801*** (0.13)
<i>Only Target Democratic</i>	-0.098 (0.16)	-0.090 (0.16)	-0.090 (0.16)
<i>Both Democracies</i>	0.384*** (0.11)	0.385*** (0.11)	0.385*** (0.11)
<i>Only the Third Party Democratic</i>	-0.077 (0.07)	-0.077 (0.07)	-0.077 (0.08)
<i>Target-Third Party Distance</i>	-0.638*** (0.05)	-0.638*** (0.05)	-0.638*** (0.04)
<i>Target-Third Party Shared Border</i>	-3.203*** (0.44)	-3.198*** (0.44)	-3.198*** (0.31)
<i>Target Economic Size</i>	-0.157*** (0.02)	-0.157*** (0.02)	-0.157*** (0.02)
<i>Harsh U.S. Sanctions - Target</i>	0.007 (0.08)	0.008 (0.08)	0.008 (0.08)
<i>Harsh U.S. Sanctions - Third-Party</i>	-0.026 (0.24)	-0.011 (0.24)	-0.011 (0.24)
<i>Time Since Busting</i>	0.066*** (0.00)	0.066*** (0.00)	0.066*** (0.00)
<i>Time Since Busting²</i>	-0.884*** (0.04)	-0.882*** (0.04)	-0.882*** (0.02)
<i>Time Since Busting³</i>	0.043*** (0.00)	0.043*** (0.00)	0.043*** (0.00)
<i>Constant</i>	-0.001*** (0.00)	-0.001*** (0.00)	-0.001*** (0.00)
<i>Observations</i>	30608	30608	52535

Notes: *, **, *** denote statistical significance at the 90%, 95%, and 99% confidence levels using two-tailed tests.

Table A7: Summary Statistics for the Civil Nuclear Cooperation Analyses' Variables

	<i>Obs.</i>	<i>Mean</i>	<i>Std. Dev.</i>	<i>Min</i>	<i>Max</i>
<i>NCA Signed</i>	153,146	0.01	0.11	0	1
<i>Only Supplier Sanctioned</i>	157,640	0.17	0.38	0	1
<i>Only the Recipient Sanctioned</i>	157,640	0.08	0.27	0	1
<i>Both Sanctioned</i>	157,640	0.02	0.14	0	1
<i>Alliance</i>	157,640	0.05	0.22	0	1
<i>Conflict</i>	153,460	0.00	0.06	0	1
<i>Shared Enemy</i>	157,640	0.04	0.20	0	1
<i>Superpower Enemy</i>	157,640	0.10	0.30	0	1
<i>Nuclear Weapons</i>	157,640	0.03	0.16	0	1
<i>Supplier's GDP</i>	149,141	4.36E+08	6.54E+08	917896	4.84E+09
<i>Recipient's GDP</i>	148,538	7.96E+07	2.69E+08	57628.3	4.84E+09
<i>Distance</i>	157,640	4510.49	2635.78	0	12347.00
<i>Exports</i>	146,178	225.54	1385.10	0	112031.00
<i>Export Pressure</i>	149,141	0.02	0.03	0.00	0.16
<i>No NCA Years</i>	153,146	17.80	13.20	0	51

**Table A8: Summary Statistics for the Civil Nuclear Cooperation Analyses' Variables
- Directed Dyads Never Sanctioned by U.S.**

	<i>Obs.</i>	<i>Mean</i>	<i>Std. Dev.</i>	<i>Min</i>	<i>Max</i>
<i>NCA's Signed</i>	49,380	0.02	0.12	0	1
<i>Only Supplier Sanctioned</i>	51,224	0	0	0	0
<i>Only the Recipient Sanctioned</i>	51,224	0	0	0	0
<i>Both Sanctioned</i>	51,224	0	0	0	0
<i>Alliance</i>	51,224	0.08	0.27	0	1
<i>Conflict</i>	49,585	0.00	0.02	0	1
<i>Shared Enemy</i>	51,224	0.03	0.16	0	1
<i>Superpower Enemy</i>	51,224	0.04	0.21	0	1
<i>Nuclear Weapons</i>	51,224	0.00	0.05	0	1
<i>Supplier's GDP</i>	47,850	4.84E+08	6.07E+08	8823612	3.29E+09
<i>Recipient's GDP</i>	47,532	6.75E+07	2.30E+08	57628.3	3.29E+09
<i>Distance</i>	51,224	4083.29	2649.01	0	12347
<i>Exports</i>	45,946	402.54	1999.82	0	112031
<i>Export Pressure</i>	47,850	0.04	0.04	0.00	0.16
<i>No NCA Years</i>	49,380	14.85	11.86	0	51

**Table A9: Summary Statistics for the Civil Nuclear Cooperation Analyses' Variables
- Directed Dyads Sanctioned by the U.S.**

	<i>Obs.</i>	<i>Mean</i>	<i>Std. Dev.</i>	<i>Min</i>	<i>Max</i>
<i>NCA's Signed</i>	103,766	0.01	0.10	0	1
<i>Only Supplier Sanctioned</i>	106,416	0.25	0.44	0	1
<i>Only the Recipient Sanctioned</i>	106,416	0.12	0.32	0	1
<i>Both Sanctioned</i>	106,416	0.03	0.17	0	1
<i>Alliance</i>	106,416	0.04	0.20	0	1
<i>Conflict</i>	103,875	0.01	0.07	0	1
<i>Shared Enemy</i>	106,416	0.05	0.22	0	1
<i>Superpower Enemy</i>	106,416	0.12	0.33	0	1
<i>Nuclear Weapons</i>	106,416	0.04	0.19	0	1
<i>Supplier's GDP</i>	101,291	4.14E+08	6.75E+08	917896	4.84E+09
<i>Recipient's GDP</i>	101,006	8.53E+07	2.86E+08	57628.3	4.84E+09
<i>Distance</i>	106,416	4716.12	2604.54	0	12192
<i>Exports</i>	100,232	144.41	971.48	0	57632
<i>Export Pressure</i>	101,291	0.02	0.03	0.00	0.16
<i>No NCA Years</i>	103,766	19.20	13.56	0	51

Table A10: Correlation Matrix for the Civil Nuclear Cooperation Analyses' Variables

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.
1. NCAs Signed	1														
2. Only Supplier Sanctioned	-0.02	1													
3. Only the Recipient Sanctioned	0.00	-0.14	1												
4. Both Sanctioned	0.00	-0.07	-0.04	1											
5. Alliance	0.11	-0.07	-0.04	0.00	1										
6. Conflict	0.00	0.03	0.04	0.01	-0.01	1									
7. Shared Enemy	0.04	-0.01	0.04	0.09	0.08	0.07	1								
8. Superpower Enemy	0.07	-0.05	0.25	0.09	0.05	0.07	0.31	1							
9. Nuclear Weapons	0.01	-0.05	0.27	0.14	-0.02	0.02	0.11	0.25	1						
10. Supplier's GDP	0.03	0.08	0.04	0.05	-0.01	-0.01	0.04	-0.07	0.01	1					
11. Recipient's GDP	0.13	0.00	0.10	0.05	0.06	0.02	0.14	0.21	0.05	0.09	1				
12. Distance	-0.08	0.04	0.02	0.02	-0.27	-0.07	-0.16	-0.05	-0.02	0.05	-0.04	1			
13. Exports	0.11	-0.04	-0.01	-0.01	0.24	-0.01	0.16	0.04	-0.01	0.15	0.33	-0.16	1		
14. Export Pressure	0.02	-0.20	0.09	-0.08	0.00	-0.01	-0.02	-0.04	0.01	0.02	0.06	-0.11	0.09	1	
15. No NCA Years	-0.07	0.08	0.18	0.11	-0.09	0.01	-0.02	-0.03	0.06	0.26	0.07	0.10	-0.05	0.17	1

Table A11: Analysis of the Determinants of Civil Nuclear Cooperation Using a Constrained Model

Variables	Model 1	Model 2	Model 3
<i>Only Supplier Sanctioned</i>	-0.526*** (0.08)	-0.523*** (0.08)	-0.523*** (0.08)
<i>Only the Recipient Sanctioned</i>	-0.691*** (0.12)	-0.687*** (0.12)	-0.687*** (0.11)
<i>Both Sanctioned</i>	-0.765*** (0.22)	-0.752*** (0.22)	-0.752*** (0.19)
<i>Conflict</i>	-1.207** (0.55)	-1.086** (0.55)	-1.093** (0.49)
<i>Nuclear Weapons</i>	1.017*** (0.12)	1.022*** (0.12)	1.022*** (0.12)
<i>Supplier's GDP</i>	0.000*** (0.00)	0.000*** (0.00)	0.000*** (0.00)
<i>Recipient's GDP</i>	0.000*** (0.00)	0.000*** (0.00)	0.000*** (0.00)
<i>Distance</i>	-0.000*** (0.00)	-0.000*** (0.00)	-0.000*** (0.00)
<i>No NCA Years</i>	-0.188*** (0.01)	-0.188*** (0.01)	-0.188*** (0.01)
<i>No NCA Years²</i>	0.007*** (0.00)	0.007*** (0.00)	0.007*** (0.00)
<i>No NCA Years³</i>	-0.000*** (0.00)	-0.000*** (0.00)	-0.000*** (0.00)
<i>Constant</i>	-2.682*** (0.06)	-2.682*** (0.06)	-2.682*** (0.06)
<i>Pseudo-R²</i>	148069	148069	148069
<i>Observations</i>	0.131		

Notes: *, **, *** denote statistical significance at the 90%, 95%, and 99% confidence levels using two-tailed tests.

Table A12: Analysis of the Determinants of Civil Nuclear Cooperation with U.S. Observations Included

Variables	Model 1	Model 2	Model 3
<i>Only Supplier Sanctioned</i>	-0.301*** (0.08)	-0.299*** (0.08)	-0.299*** (0.08)
<i>Only the Recipient Sanctioned</i>	-0.479*** (0.10)	-0.477*** (0.10)	-0.477*** (0.10)
<i>Both Sanctioned</i>	-0.532*** (0.19)	-0.519*** (0.19)	-0.519*** (0.19)
<i>Alliance</i>	1.167*** (0.06)	1.167*** (0.06)	1.167*** (0.05)
<i>Conflict</i>	-1.756*** (0.53)	-1.634*** (0.53)	-1.641*** (0.48)
<i>Shared Enemy</i>	0.336*** (0.06)	0.336*** (0.06)	0.336*** (0.06)
<i>Superpower Enemy</i>	1.013*** (0.06)	1.013*** (0.06)	1.013*** (0.05)
<i>Nuclear Weapons</i>	0.447*** (0.13)	0.450*** (0.13)	0.450*** (0.12)
<i>Supplier's GDP</i>	0.000*** (0.00)	0.000*** (0.00)	0.000*** (0.00)
<i>Recipient's GDP</i>	0.000*** (0.00)	0.000*** (0.00)	0.000*** (0.00)
<i>Distance</i>	-0.000*** (0.00)	-0.000*** (0.00)	-0.000*** (0.00)
<i>Exports</i>	-0.000*** (0.00)	-0.000*** (0.00)	-0.000*** (0.00)
<i>Export Pressure</i>	4.623*** (0.70)	4.631*** (0.70)	4.631*** (0.73)
<i>No NCA Years</i>	-0.183*** (0.01)	-0.183*** (0.01)	-0.183*** (0.01)
<i>No NCA Years²</i>	0.006*** (0.00)	0.006*** (0.00)	0.006*** (0.00)
<i>No NCA Years³</i>	-0.000*** (0.00)	-0.000*** (0.00)	-0.000*** (0.00)
<i>Constant</i>	-3.293*** (0.06)	-3.293*** (0.06)	-3.293*** (0.06)
<i>Pseudo-R²</i>	0.202		
<i>Observations</i>	153895	153895	153895

Notes: *, **, *** denote statistical significance at the 90%, 95%, and 99% confidence levels using two-tailed tests.

**Table A13: Cross Tab of NCAs by Dyads Never Sanctioned by the U.S.
Compared to Directed Dyads that Experienced U.S. Sanctions**

All NCAs	Directed Dyads Never Sanctioned by U.S.	Directed Dyads Sanctioned by the U.S.	Total
	0	1	
0	52,943 (97.67%)	106,017 (98.82%)	158,960 (98.43%)
1	1,261 (2.33%)	1,271 (1.18%)	2,532 (1.57%)
Total	54,204 (100.00%)	107,288 (100.00%)	161,492 (100.00 %)

Table A14: Analysis of the Determinants of Civil Nuclear Cooperation in Directed Dyads with a Party Sanctioned by the U.S. from 1950-2000

Variables	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
<i>Neither Sanctioned</i>				0.377*** (0.09)	0.375*** (0.09)	0.375*** (0.09)
<i>Only Supplier Sanctioned</i>	-0.377*** (0.09)	-0.375*** (0.09)	-0.375*** (0.09)			
<i>Only the Recipient Sanctioned</i>	-0.703*** (0.13)	-0.700*** (0.13)	-0.700*** (0.12)	-0.326** (0.15)	-0.325** (0.15)	-0.325** (0.14)
<i>Both Sanctioned</i>	-0.850*** (0.23)	-0.837*** (0.23)	-0.837*** (0.20)	-0.472** (0.23)	-0.462** (0.23)	-0.462** (0.21)
<i>Alliance</i>	1.093*** (0.09)	1.094*** (0.09)	1.094*** (0.09)	1.093*** (0.09)	1.094*** (0.09)	1.094*** (0.09)
<i>Conflict</i>	-0.964* (0.54)	-0.842 (0.54)	-0.850* (0.49)	-0.964* (0.54)	-0.842 (0.54)	-0.849* (0.49)
<i>Shared Enemy</i>	0.076 (0.11)	0.078 (0.11)	0.078 (0.10)	0.076 (0.11)	0.078 (0.11)	0.078 (0.10)
<i>Superpower Enemy</i>	0.785*** (0.09)	0.786*** (0.09)	0.786*** (0.08)	0.785*** (0.09)	0.786*** (0.09)	0.786*** (0.08)
<i>Nuclear Weapons</i>	0.758*** (0.14)	0.763*** (0.14)	0.763*** (0.13)	0.758*** (0.14)	0.763*** (0.14)	0.763*** (0.13)
<i>Supplier's GDP</i>	0.000*** (0.00)	0.000*** (0.00)	0.000*** (0.00)	0.000*** (0.00)	0.000*** (0.00)	0.000*** (0.00)
<i>Recipient's GDP</i>	0.000*** (0.00)	0.000*** (0.00)	0.000*** (0.00)	0.000*** (0.00)	0.000*** (0.00)	0.000*** (0.00)
<i>Distance</i>	-0.000*** (0.00)	-0.000*** (0.00)	-0.000*** (0.00)	-0.000*** (0.00)	-0.000*** (0.00)	-0.000*** (0.00)
<i>Exports</i>	-0.000*** (0.00)	-0.000*** (0.00)	-0.000*** (0.00)	-0.000*** (0.00)	-0.000*** (0.00)	-0.000*** (0.00)
<i>Export Pressure</i>	4.930***	4.954***	4.954***	4.930***	4.954***	4.954***

	(1.14)	(1.14)	(1.21)	(1.14)	(1.14)	(1.21)
<i>No NCA Years</i>	-0.164***	-0.164***	-0.164***	-0.164***	-0.164***	-0.164***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
<i>No NCA Years</i> ²	0.006***	0.006***	0.006***	0.006***	0.006***	0.006***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
<i>No NCA Years</i> ³	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
<i>Constant</i>	-3.463***	-3.462***	-3.462***	-3.841***	-3.837***	-3.837***
	(0.09)	(0.09)	(0.09)	(0.12)	(0.12)	(0.12)
<i>Pseudo-R</i> ²	100,114	100,114	100,114	100,114	100,114	100,114
<i>Observations</i>	0.153			0.153		

Notes: *, **, *** denote statistical significance at the 90%, 95%, and 99% confidence levels using two-tailed tests.